

The Secretary House of Representatives Standing Committee on Environment and Heritage PO Box 6021 Parliament House CANBERRA ACT 2600

11 May 2006

Dear Sir or Madam

Thank you for the opportunity to provide a submission to the House of Representatives Standing Committee on Environment and Heritage Inquiry into the potential development of a national *Sustainability Charter for Australia*. Please find attached Hydro Tasmania's submission to this Inquiry.

Hydro Tasmania would like to congratulate the House of Representatives Standing Committee on Environment and Heritage (the Committee) for examining the potential development of a National Sustainability Charter. Hydro Tasmania supports the establishment of an Australian Sustainability Charter that:

- includes aspirational statements and measurable targets and operates as an umbrella to bring together existing programs;
- includes incentive payments paid directly to companies, as well as to State Government, in appropriate areas;
- incorporates water targets that will increase water quality and encourage improved efficiency of water use;
- includes energy targets such as:
 - to increase renewable energy production to 20,000GWh of electricity consumption by 2020;
 - o to increase funding to sustainable energy technologies;
 - to increase energy efficiency and increase funding to energy efficiency programs; and
- incorporates transport targets such as to increase the number of hybrid and hydrogen vehicles bought in Australia each year.

If you or the Committee would like to discuss any points raised in our submission, please do not hesitate to call Ms Lili Calitz on (03) 6230 5944 or

email: <u>Lili.Calitz@hydro.com.au</u>. We would also be pleased to attend a Hearing if one is held in relation to this Inquiry.

Yours sincerely

G L Willis Chief Executive Officer

HOUSE OF REPRESENTATIVES STANDING COMMITTEE ON ENVIRONMENT AND HERITAGE INQUIRY INTO THE POTENTIAL DEVELOPMENT OF A NATIONAL SUSTAINABILITY CHARTER FOR AUSTRALIA

Hydro Tasmania Submission

Executive Summary

Hydro Tasmania would like to congratulate the House of Representatives Standing Committee on Environment and Heritage (the Committee) for examining the potential development of a National Sustainability Charter.

Sustainability is about ensuring a long-term outlook that is integrated throughout all sectors of the economy, all sections of business and all parts of society. It is also about ensuring a collaborative and inclusive process that recognises the inter-relatedness of people with each other and with the natural world. The proposed National Sustainability Charter can provide a bridge to this future mindset, by beginning a process of thinking about sustainability and encouraging people to behave in a sustainable manner.

We support the establishment of a National Sustainability Charter that aims to ensure that sustainability is an important part of all government, industry, community and individual decision making and activities across Australia. The Charter should build on existing policies and programs that increase sustainability and increase the integration of solutions across areas of work.

Our submission outlines the following:

- 1. Hydro Tasmania's experience with sustainability.
- 2. Proposed structure of the Charter.
- 3. Specific comments on the Terms of Reference, in particular, the importance and achievability of certain targets that should be included in the Charter in relation to:
 - a. Water;
 - b. Energy; and
 - c. Transport.

In brief, Hydro Tasmania supports the establishment of an Australian Sustainability Charter that:

- includes aspirational statements and measurable targets and operates as an umbrella to bring together existing programs;
- includes incentive payments paid directly to companies, as well as to State Government, in appropriate areas;
- incorporates water targets that will increase water quality and encourage improved efficiency of water use;
- includes energy targets such as:

- to increase renewable energy production to 20,000GWh of electricity consumption by 2020;
- o to increase funding to sustainable energy technologies;
- to increase energy efficiency and increase funding to energy efficiency programs; and
- incorporates transport targets such as to increase the number of hybrid and hydrogen vehicles bought in Australia each year.

1. Hydro Tasmania's experience with sustainability

Hydro Tasmania is Australia's largest renewable energy generator and currently produces approximately 60 per cent of the total renewable energy generated in Australia. Sustainability is an important driving force of our business goals and Hydro Tasmania has taken steps to facilitate the process of embedding sustainability into its business practices.

Sustainability Policy and Report

In 2005, Hydro Tasmania adopted a Sustainability Policy, which articulates the vision for a sustainable future and outlines nine broad sustainability principles to embed sustainability practices into business activities. The sustainability principles apply to nine elements of business activities and decision making processes. These elements are in turn associated with twenty-nine sustainability indicators, which crosscut the core business areas comprising Hydro Tasmania and incorporate the traditional financial, environmental and social triple bottom line reporting categories.

A business wide sustainability performance self-assessment has been undertaken and is an inherent part of strengthening the sustainability ethic through the business. Hydro Tasmania's commitment to sustainability was recognised by the Energy Supply Association of Australia (esaa) by being awarded the 2005 Sustainability Report Award. This was awarded for our integrated approach to improved sustainability activities.

International Standards

Hydro Tasmania has also been involved in the development of international standards, such as, the International Hydropower Association (IHA) *Sustainability Guidelines* and *Sustainability Assessment Protocol* and the World Wind Energy Association *Sustainability and Due Diligence Guidelines*. These both help to ensure that world-wide renewable energy developments are sustainable.

Economic and social sustainability

Hydro Tasmania is a significant employer in Tasmania, and is a major contributor to the State's economic and social viability. We have also had a

positive impact upon the cultural development of the region. Confidence within the community that Hydro Tasmania is a sustainable business is an important indicator that Hydro Tasmania has invested in the development of trust and respect with stakeholders through transparency and engagement.

2. Proposed structure of the Charter

Hydro Tasmania supports the establishment of a National Sustainability Charter. The Charter should include aspirational statements as well as measurable targets in the areas of energy, water, built environment, transport and ecological footprint. A combination of short and long-term targets provides certainty for business and investment while ensuring increasing sustainability into the future.

Aspirational statements should highlight the vision that is to be achieved, such as:

"Commonwealth and State Governments aspire to increase renewable energy use."

The measurable targets should be:

- negotiated and mutually agreed between the Commonwealth Government and the Governments of States and Territories;
- set with reference to individual States' circumstances, such as a State's ability to cost-effectively meet the target and the natural resources of the State; and
- set in a manner that involves industry and business groups where appropriate, such as where the industry is in a good position to contribute to the achieving of the target.

The Sustainability Charter should act as an umbrella that unites already existing programs and goals together. A lot of work is already being done across many areas to increase environmental, economic and social sustainability, such as the National Water Initiative and the National Framework on Energy Efficiency, Natural Resource Management Framework and the National Pollution Inventory as well as many programs and initiatives at a State and Local Government Level.¹ This work should not be duplicated.

Instead, the Charter should ensure that programs are: comprehensive across all sustainability areas; that all States are acting in all areas; and that programs are integrated and work together. A Sustainability Charter will provide encouragement for States to learn from programs in different subject areas and different States.

¹ These include the South Australia Premier's Round Table on Sustainability (<u>http://www.environment.sa.gov.au/sustainability/roundtable.html</u>), WA's State Sustainability Strategy (http://www.sustainability.dpc.wa.gov.au/docs/Strategy.htm) and Tasmania's sustainability tests contained within the Resource Management and Planning Scheme

A Commissioner is an important focus point for sustainability, as is shown in New Zealand where there has been a Parliamentary Commissioner for the Environment since 1987². The Commissioner concentrates on environmental sustainability and has powers to investigate environmental issues. The New Zealand Commissioner is currently investigating:

- How well the Electricity Commission is meeting the government's environmental goals.
- The potential use of economic instruments by government to encourage environmental sustainability, specifically, managing waste.
- Developing a Genuine Process Indicator (GPI) for New Zealand. Unlike the Gross Domestic Product which measures the flow of goods and services, the GPI factors in social and environmental costs and benefits to give a more complete picture of progress and sustainability.

Incentive payments

The discussion paper suggests that State Governments could be rewarded with incentive payments along the lines of the National Competition Council framework.

Hydro Tasmania suggests that the payment of incentives directly to industries and companies should be investigated. It is appropriate and beneficial to include those who have a significant role in contributing to an environmental problem, as these are the organisations best-placed to contribute to the solution. This leads to better outcomes, which are more easily achieved and more cost-effectively implemented.

Incentive payments could be allocated to companies under the Charter through a number of means. Targets could be set for an industry or individual companies and the achievement of these targets could be rewarded either through direct payments or taxation incentives. For example, the company tax rate could be linked to levels of achievement under the Charter.

The achievement of the targets under the Charter could also be encouraged through the availability of initiation funds to assist companies to adjust and change business practices initially, or by making eligibility for funding and grants from Government bodies conditional on companies meeting certain targets of sustainability.

This is a complicated area and Hydro Tasmania would be pleased to discuss the payment of incentives to companies under the Sustainability Charter further with the Committee.

Reporting

Existing reporting should be used as far as practicable, such as State of the Environment Reporting and the National Greenhouse Gas Inventory. However, States and Commonwealth Agencies should provide an annual summary of work that has occurred in relation to the aspirational statements,

² http://www.pce.govt.nz/

and progress that has been achieved in relation to specific measurable targets. The Commissioner could be the receiver of Sustainability Reports.

3. Response to the Terms of Reference

a. Water

Hydro Tasmania supports development of targets in relation to water quality, water consumption and water re-use where these facilitate improved performance with regard to environmental, economic and social sustainability.

Hydro Tasmania suggests that the Sustainability Charter builds on work already done. For example, the 'Protected Environmental Values' part of the regulatory framework developed in Tasmania by the (then) Department of Primary Industries Water and the Environment could be utilised. Under this framework each catchment was assessed to determine the environmental values important in that catchment. The waterway is then managed to support these values and its status is monitored by tracking any trends in key parameters. This is part of the implementation of the State Policy on Water Quality Management.

The Sustainability Charter should include water targets on the following issues:

- identifying the environmental water requirements for stressed water bodies and waterways in Australia;
- improving efficiency of water use;
- improving water quality and reducing the volume of contaminants that are discharged to water;
- encouraging water re-use; and
- increasing funding levels for R&D in the areas of water re-use and efficiency.

Hydro Tasmania would be pleased to work with the Committee and assist with investigations to establish and recommend appropriate measurable targets in relation to each of the above for each State.

b. Energy

Hydro Tasmania supports the inclusion of sustainable energy targets in the Charter. The energy sector is vitally important to environmental, economic and social sustainability, due to its contribution to:

• Climate change. The stationary energy sector releases almost 50% of Australia's greenhouse gas emissions³. Climate change has the potential to contribute significant costs to society, such as increased

³ National Greenhouse Gas Inventory 2003, page A15,

http://www.greenhouse.gov.au/inventory/2003/pubs/inventory2003parta.pdf

unpredictability of weather patterns, drought and disaster events, leading to interference with agriculture and other economic activity⁴.

- Air and water pollution and waste, and the production of nitrogen oxides, sulphur dioxide and particulates caused by the burning of coal and gas. These have negative environmental effects and significant economic and social costs, such as asthma and other respiratory problems.
- Economic sustainability as Australia's economic growth is currently dependent on increased energy usage:
 - Renewable energy production diversifies the sources which fulfil our energy needs and ensures those sources come from within Australia.
 - Energy efficiency and other measures to reduce energy use allow us to meet future energy needs with domestic resources and without increasing the burden on the environment from energy production.
 - These two together ensure a reliable and secure long term energy supply.
- Jobs and regional development. Investing in the renewable energy industry and technologies is investment in a fledgling industry, which often operates in regional areas.

According to our analysis, a combination of the market-driven mechanisms of a national emissions trading scheme and renewable energy targets are required to deliver a balanced outcome of sustainable, economic growth with a significant reduction in greenhouse gas production across Australia. The Charter is important in establishing the policy environment required to spark the development of these sorts of mechanisms.

We recognise how the complexity of these mechanisms can be difficult to model and predict, so Hydro Tasmania would be pleased to discuss our research towards these opportunities further with the Committee if desired.

Hydro Tasmania recommends the following targets be included in the Sustainability Charter:

- increase renewable energy production;
- increase funding and other financial incentives (such as taxes) to sustainable energy companies when compared to funding for established technology;
- decrease greenhouse gas emissions from the energy sector;
- increasing the efficiency of energy use; and
- work to decouple economic growth from increasing energy use.

Ata minimum, Hydro Tasmania recommends that the charter include an Australia wide target to increase renewable energy production to 20,000 Giga-

⁴ This has been recognised by business and insurance companies.

watt hours (GWh) of electricity production by 2020. This target is consistent with the findings of the Commonwealth Government's review of the Mandatory Renewable Energy Target (MRET)⁵.

We also suggest that the Charter be framed to allow the inclusion of state based energy sector targets, such as state renewable energy and greenhouse gas abatement targets. While we recognise that there is no substitute for a coordinated national policy approach to sustainability, the inclusion of such targets could facilitate commitment to the Charter by the states and territories.

State Renewable Energy Targets

If the National Sustainability Charter is framed to include state based targets, Hydro Tasmania proposes the inclusion of State renewable energy targets in the National Sustainability Charter. This will help stimulate and maintain renewable energy development and fill the gap left by the non-extension of the MRET that has caused investment in the renewable energy industry to stall.

Renewable energy targets could also serve to encourage the states to work together and provide the policy environment within which a state-based MRET scheme or a national emissions trading scheme could be implemented.

Some States have already set their own goals for renewable energy production:

- The Victorian Government has set a target of 10% of electricity consumption provided by renewables by 2012 and a target of up to 1,000 MW of installed capacity for wind energy by 2006⁶.
- South Australia has set a target of 15 per cent of electricity from • renewable energy sources within 10 years from 2004⁷.

Targets within the Sustainability Charter could apply to those States and Territories who do not currently have a specific renewable energy target and could be negotiated between the Federal and State Governments in the realm of 5-10% of total electricity consumption over the next 10 years. As all States of Australia have very high levels of available renewable energy resources, this level of increase is achievable.

State Greenhouse Gas Reduction Targets

Hydro Tasmania recommends that national and state emissions reductions targets be incorporated into the Sustainability Charter.

Greenhouse gas emissions are currently measured and reported on at the national level through the National Greenhouse Gas Inventory as part of

http://www.seav.sustainability.vic.gov.au/renewable_energy/index.asp

⁵ Renewable Opportunities, A Review of the Operation of the Renewable Energy (Electricity) Act 2000 (September 2003) http://www.mretreview.gov.au/report/index.html ⁶ 'Renewable Energy' Sustainable Energy Authority Victoria

http://www.environment.sa.gov.au/sustainability/whats sa doing.html

Australia's obligations under the United Nations Framework Convention on Climate Change. Therefore, emissions reduction targets will provide the Sustainability Charter with a direct measure of the sustainability of the energy sector in relation to its contribution to climate change.

Several companies, including Hydro Tasmania, voluntarily report greenhouse gas emissions through the Australian Greenhouse Office's Greenhouse Challenge. There is no legal obligation on companies to report emissions; a state target could encourage this.

This target could be expressed as a percentage reduction in greenhouse gas emissions in the energy sector as compared to a baseline, or a business-asusual projection. This could provide support for the implementation of a national emissions trading scheme that would further encourage sustainability in the energy sector.

Energy Efficiency

Hydro Tasmania recommends that energy efficiency goals be incorporated into the Charter. These could include a target to increase the output from each unit of energy used (ie the efficiency of energy use), a target to decrease energy use, or a target to institute a certain amount or level of energy efficiency measures, such as energy efficient lighting.

Renewable Energy and Energy Efficiency Funding

A significant barrier to switching to renewable energy sources is that there is comparatively little funding going to these sources as compared with traditional energy sources. A University of Technology, Sydney paper has estimated that at least \$8,880 million per year was paid to the Australian fossil fuel industry through financial subsidies in 2000. This figure does not include the historical subsidies such as building of infrastructure during the development of fossil fuel industries in Australia.⁸

Renewable energy and end-use efficiency subsidies were stated to be a small fraction of the total energy subsidies. For example, \$200 million in new renewable energy funding announced under the Commonwealth Government's *Energy White Paper—Securing Australia's Energy Future*⁹.

Therefore a target of renewable energy funding should be established whereby funding to renewable energy and energy efficiency programs is increased. The funding must encompass the full production cycle from research and development to deployment in the market place.

⁸ Working Paper CR2003/01: 'Subsidies that Encourage Fossil Fuel Use in Australia', Christopher Riedy, PhD Candidate, Institute for Sustainable Futures, University of Technology, Sydney, 2003 http://www.isf.uts.edu.au/publications/CR 2003 paper.pdf

⁹ 'Government targets barriers to renewable energy', Federal Minister for Environment and Heritage Media Release, 15 June 2004

http://www.deh.gov.au/minister/env/2004/mr15jun504.html

Decoupling economic growth from increasing energy use

Our economic growth is currently dependant on increasing energy use. Moving to alter our economic system so that the economy can grow while our energy use stays static or falls will make an important contribution to the environmental sustainability of our energy sector and the sustainability of the Australian economy. This involves a shift in attitude towards energy in the general economy and the implementation of available technology to reduce energy use while increasing production. It can also be assisted through life cycle analysis of energy usage.

For example, Denmark has achieved a 70% growth in their economy since the oil shock of the 1970s, while controlling energy use¹⁰.

c. Transport

Hydro Tasmania recommends that targets be included to encourage the development of alternative fuels in the transport sector, especially hydrogen produced from renewable energy sources, and bio-fuels.

The transport sector accounts for 41 per cent of total Australian final energy consumption and contributes 18.3% of Australia's net greenhouse gas emissions¹¹ thus contributing to climate change. Vehicles also release harmful pollutants such as sulphur dioxide, which causes many health problems.

It is important that the targets cover freight, government and commercial fleets and domestic vehicles. Hydro Tasmania recommends that the following targets be included in the Sustainability Charter:

- Reduce emissions from the transport sector by 2% by 2030¹².
- Increase R&D funding available to clean transport fuels and technologies to a certain percentage of funding allocated for roads.
- Increase the number of hybrid vehicles bought in Australia each year to • a certain percentage of total cars (petrol/bio-fuel, petrol/hydrogen and petrol/electric) by 2010
- Increase the number of hydrogen vehicles to a certain percentage by 2020.

¹⁰ 'Decoupling environment from economic growth' OECD Forum, 14th May, 2001 : The Transition to Sustainable Development: Are We Making Progress in Decoupling Economic Growth from Environmental Degradation?

http://www.oecdobserver.org/news/fullstory.php/aid/453/Decoupling environment from econ omic_growth_.html ¹¹ National Greenhouse Gas Inventory, 2003, Page A-16,

http://www.greenhouse.gov.au/inventory/2003/pubs/inventory2003parta.pdf

¹² This figure is in line with the Federal governments Low Emission Technology Demonstration Fund (LETDF) contained within the Energy White Paper—Securing Australia's Energy Future.

- Decrease the amount of vehicle emissions allowed through vehicle emissions standards¹³.
- Implement vehicle efficiency standards. For example, the standard may be to decrease fuel use from 8Lt/100km to 5Lt/ 100km by 2010.
- Reduce use of individual commuting transport and increase public transport use.

Conclusion

Hydro Tasmania commends the Committee's efforts to establish a National Sustainability Charter. A Sustainability Charter has the potential to ensure that environmental, economic and social sustainability is integrated into all levels of Government decision making. It also has the potential to encourage all industries to become involved in the sustainability of their business. This will ensure that Australia will maximise the benefits it can gain from its economy and environment.

¹³ All efforts should be made to attain Euro5 standards by 2008-2010 in accordance with the EU implementation strategy and build on the Australian Government's 1999 announcement that it would harmonise Australian emission standards with international standards by 2006.